Pest Update (May 16, 2012)

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Note: samples containing living tissue may only be accepted from South Dakota. Please do not send samples of dying plants or insects from other states. If you live outside of South Dakota and have a question, instead please send a digital picture of the pest or problem. **Walnut samples may not be sent in from any location – please provide a picture!**

Available on the net at:
http://sdda.sd.gov/Forestry/Educational-Information/PestAlert-Archives.aspx

Any treatment recommendations, including those identifying specific pesticides, are for the convenience of the reader. Pesticides mentioned in this publication are generally those that are most commonly available to the public in South Dakota and the inclusion of a product shall not be taken as an endorsement or the exclusion a criticism regarding effectiveness. Please read and follow all label instructions and the label is the final authority for a product's use on a particular pest or plant. Products requiring a commercial pesticide license are occasionally mentioned if there are limited options available. These products will be identified as such but it is the reader's responsibility to determine if they can legally apply any product identified in this publication.

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Plant development

We are still ahead of plant development this year due to the mild winter and early spring. Last year the crabapples were blooming, this year that was weeks ago and now the mockoranges are flowering in Brookings – about 3 weeks earlier than normal.

Current Concerns

We are seeing a lot of dieback and thin canopies in birches and maples across the eastern half of the state. Generally the decline is about the upper 1/3 or 1/2 of the canopy. Some of these tops are now just breaking bud and are slowing leafing out; in others the tops are clearly dead and the shoots snap off easily. The culprit is most likely last winter's weather as birches and maples are prone to desiccation injury and the combination of a dry fall and warm winter set up the perfect storm for killing their buds. If the tops have not leafed out by early June, they probably are not going to recover.

Ash rust (*Puccinia sparganioides*), a common fungal disease of ash trees, is beginning to appear in the Mitchell area and many other East River locations. The infection disease seldom result in serious injury to the tree, beyond the appearance, but it can become a severe problem during wet spring such as occurred back in 2008. This spring is much drier and we are not likely to see extensive defoliation due to the disease, just deformed and discolored leaves. The rust disease's alternate host is cordgrass and in years with wet, cool springs the disease moves readily from the grass to the ash trees. The disease seldom requires control and if control is applied (myclobutanil is the most common active ingredient used), it must be applied in early spring just as the leaves are opening. We are too late for control this year.

Tasks to complete

This is a good picture of birch dieback resulting from two factors, the winter weather, and attack by the **bronze birch borer** (*Agrilus anxius*). The bronze birch borer attacks during late May and June, laying eggs on susceptible hosts, and the eggs hatch about two weeks later. The larvae burrow through the inner

bark severing the connection between the leaves and the roots resulting in root decline followed by dieback in the canopy. Often times the telltale D-shaped emergent holes of the adults leaving the tree are not seen until the tree is almost completely dead. The best control is to keep the tree watered and roots cool – birch trees should always be mulched – and then treat the tree with imidacloprid, the active ingredient in Bayer Advance Tree and Shrub Insect Control. This is an excellent pesticide for keeping the borer from killing your tree but only if applied early enough, either very early spring or even fall, and *before* the tree is exhibiting significant dieback. Usually once the tree has declined to the point seen in the picture it is beyond hope. However, sometimes even these infested trees will recover though the odds are not in their favor.

Phomopsis twig blight (*Phomopsis juniper-ovora*) is showing up on juniper (cedar) plantings throughout the state. I have received more samples, and seen more windbreaks, showing symptoms of this disease than in the past several years. The typical symptoms of this disease is the current foliage at the branch tips turning pale green then light yellow-green, then reddish brown and finally ash gray. Many plants are exhibiting yellow-green tips at this time. Near the base of these infected twigs you can find small, black fruiting bodies of the fungus. The symptoms, and even the fruiting bodies, can be easily confused with another common twig blight fungus *Kabatina juniperi* so it is always a good idea to send in a sample for diagnosis. Phomopsis twig blight can be managed with applications of a fungicide containing copper or propriconazole as the active ingredient applied now and continuing at two-week intervals until the spring growth matures usually by mid-June.

E-samples

The previous year's wet conditions are still taking a toll on trees despite the dry weather we have been experiencing in much of the state during the last 8 or 9 months. I have seen numerous spruce trees exhibiting dieback and covered with stunted purple needles. These trees are usually in a low area of the yard and the landowner mention that "Well it was standing in water for several weeks or a month or more in 2010 and 2011".

Spruce do not like “wet feet” and frequently will decline and eventually die if placed on a poorly drained site.

The same is true for many of our stone fruits such as apricots, cherries and plums. These trees also do not like “wet feet” but their response to this situation is often just a little brighter autumn color and then the next year they fall over due to root mortality. I am seeing a number of apricots that have tipped over this spring, all in mostly full leaf, but with extensive root dieback. Each of these trees was in wet soils for the last two springs.

A “galling” problem. I have received several pictures of lindens with these bumps on the leaves. These are caused by small mites that form spindle galls, elongated galls on the top of the leaves, or erineum (velvet) galls, fuzzy patches on the underside of the leaves. Regardless of which mite might be responsible for the symptoms, there is little that can, or should, be done for the problem. The galls rarely destroy enough leaf tissue to affect the tree’s health. They are an aesthetic problem, not a serious health threat. There is also very little that can be done to reduce the problem as most insecticides provide minimal control of mites and even if they will work, the timing of the treatment is not known. Often these galls appear on a tree for several years and then just disappear.

Samples received

Brookings County FL1200014 **A black powdery covering on these pine needles – what is causing this problem?**

This is pine tortoise scale, a sucking insect that excretes a sticky substance called honeydew. If the plant is heavily infested with this scale the branches will be covered with the sooty mold fungus that occurs on the honeydew. Heavy infestation can also result in thin canopies and dead branches. The control is either imidacloprid as a soil drench or Malathion applied when mockorange are in bloom (now), and repeated 10 days later to kills the hatched

crawlers. A treatment of horticultural oil is even better than Malathion as the oils is not as deadly to the natural enemies – insects that feed on or in the scale. However, if improperly applied oils can be toxic to the plant.

Jones County FL1200015 **How do I get rid of these galls?**

These are the galls to cedar-apple rust. The galls form on the junipers (cedars) and release spores that infect the apples and crabapples. The infection on apples and crabapples results in discolored foliage and fruit and premature drop of the leaves. The galls on the cedars rarely cause any serious harm to the evergreen, though occasionally a twig that has several gall on it may turn yellow and die (as seen in the picture). If the plant is not too large hand-pruning the galls is probably the best way to remove them but this will not prevent another infection next spring as new spores will land on the plant this summer.

Perkins County **These are some maples and a cottonwood that are not leafing out or are only leafing at the base of the tree.**

Perkins County is not the ideal planting site for maples, other than the native boxelder. All three maple shoots submitted exhibited very little growth for the past two years, less than a few inches! The cottonwood does not appear to be growing well either. I suspect this is environmental injury rather than an insect or pathogen.

Perkins County **These two ponderosa pine trees have just started showing discolored foliage – what might be the problem?**

The symptoms do not appear to be related to either Diplodia or Dothestroma, the two most common diseases of pine – nor are there any signs of these pathogens. This might just be desiccation injury due to the dry winter. I would watch to see how well the trees candle out this spring with the new growth. If the new shoots appear expand normally and have the typical color the trees will probably recover. If the new growth is stunted or discolored contact me again and I will look at the trees when I am in Lemmon this June.